

8. (Original) The method of claim 7, wherein said step of supporting said main reflector further comprises the step of supporting said platform adjacent an outer surface of an aircraft.

9. (Currently Amended) An antenna adapted to be rotated about an azimuthal axis of rotation in a manner which reduces the radius of an envelope within which said antenna moves during rotation of said antenna, said antenna comprising:

a curved main reflector having an axial center and outermost lateral side edges;

a platform for supporting said curved main reflector;

a motor for rotating said platform about said azimuthal axis; and

an encoder to track said azimuthal axis and provide feedback to said motor;

wherein said main reflector is fixedly supported relative to said platform such that said main reflector rotates about ~~said rotary joint and about~~ said azimuthal axis of rotation; and

wherein said azimuthal axis is maintained at a constant position at an outermost edge of ~~[[of]]~~ said main reflector at all times during azimuthal rotation of said main reflector.

10. (Cancelled)

11. (Cancelled)

12. (Previously Presented) The antenna of claim 9, wherein:

said antenna includes a feedhorn spaced apart from said curved main reflector;

and

said platform couples said feedhorn to a transmission line using ^asaid rotary joint.

13. (Original) The antenna of claim 12, wherein said transmission line comprises a coaxial cable.

14. (Previously Presented) The method of claim 1, further comprising the step of using an elevation motor to position said main reflector at a predetermined elevation angle.

15. (Previously Presented) The method of claim 4, further comprising the step of using an elevation motor to position said main reflector at a predetermined elevation angle.

16. (Previously Presented) The method of claim 7, wherein said step of supporting said main reflector further comprises the step of using an elevation motor to position said main reflector at a predetermined elevation angle.

17. (Previously Presented) The antenna of claim 9, further comprising an elevation motor for positioning said main reflector at a predetermined elevation angle.